



WebObjects Solutions

Session 713





WebObjects Solutions

Toni Trujillo Vian
Director, WebObjects Engineering

Introduction

- Examples and case studies of how WebObjects has been used to bring information to the web, streamline business operations, and solve real world problems



What You Will Learn

- Innovative ways that WebObjects is being utilized
- WebObjects solves myriad business needs
- WebObjects projects have high success rates

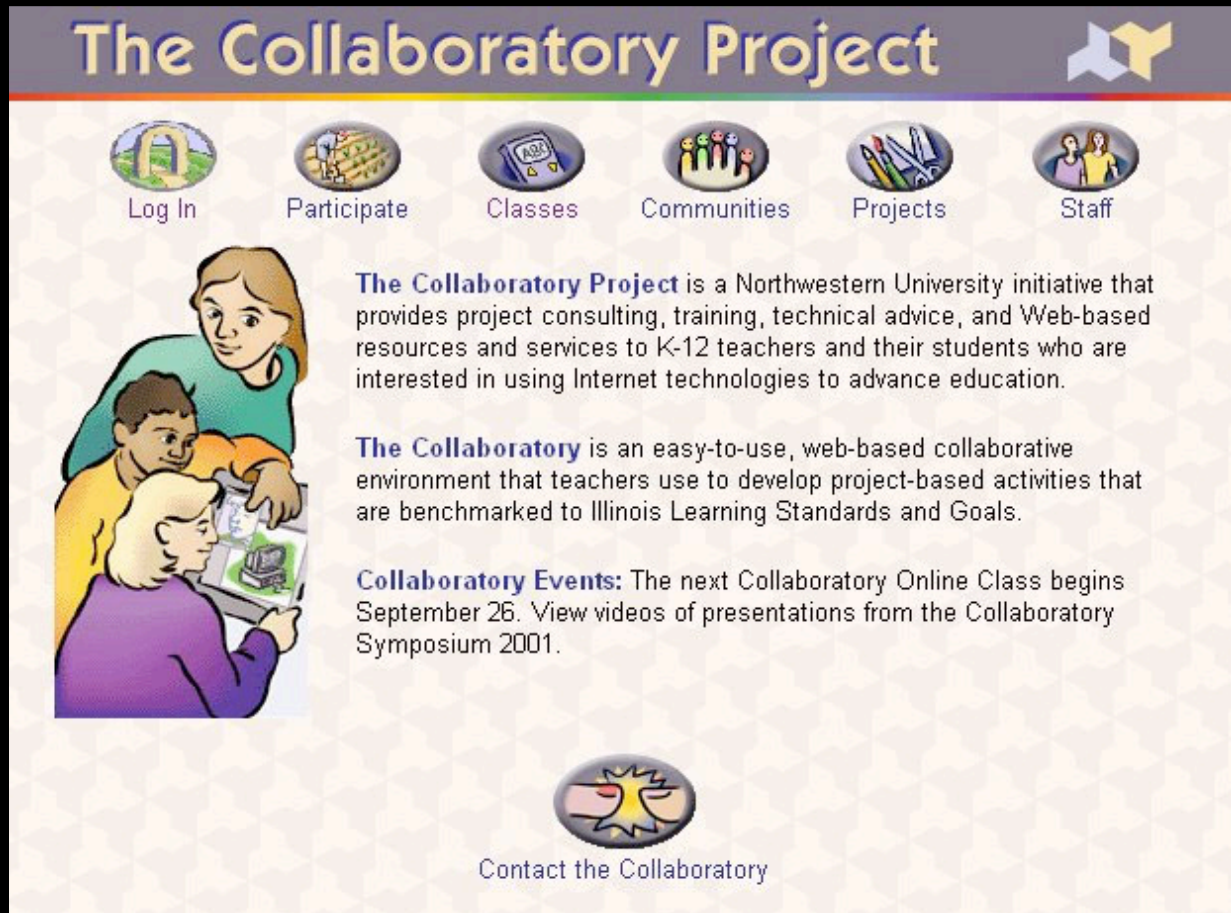




The Collaboratory Project

Bob Davis
Collaboratory Project Manager
NorthWestern University

collaboratory.nunet.net



The screenshot shows the homepage of 'The Collaboratory Project'. At the top, the title 'The Collaboratory Project' is displayed in a stylized font, accompanied by a logo of three overlapping shapes. Below the title is a navigation bar with six icons and labels: 'Log In' (a person at a computer), 'Participate' (a person at a computer with a gear), 'Classes' (a book with 'ABC' on it), 'Communities' (a group of people), 'Projects' (a pencil and paper), and 'Staff' (two people). On the left side, there is an illustration of a woman and two children looking at a computer screen. To the right of this illustration, there are three paragraphs of text. The first paragraph describes the project as a Northwestern University initiative providing consulting, training, and technical advice to K-12 teachers. The second paragraph describes the Collaboratory as a web-based collaborative environment for project-based activities. The third paragraph mentions 'Collaboratory Events' and a class starting on September 26. At the bottom center, there is a logo of a stylized sun or star and the text 'Contact the Collaboratory'.


The Collaboratory Project

[Log In](#) [Participate](#) [Classes](#) [Communities](#) [Projects](#) [Staff](#)

The Collaboratory Project is a Northwestern University initiative that provides project consulting, training, technical advice, and Web-based resources and services to K-12 teachers and their students who are interested in using Internet technologies to advance education.

The Collaboratory is an easy-to-use, web-based collaborative environment that teachers use to develop project-based activities that are benchmarked to Illinois Learning Standards and Goals.

Collaboratory Events: The next Collaboratory Online Class begins September 26. View videos of presentations from the Collaboratory Symposium 2001.

 Contact the Collaboratory



Collaboratory Project

- Northwestern University Information Technology initiative
- Developed to help educators integrate Internet technologies in to their curricula
- 5-Year, \$2.2+ Million Investment
- Current funding from the Illinois State Board of Education (ISBE) and SBC Ameritech



Collaboratory Project

- Scaffolding curricular innovation
- Mature, well-developed resources and services
- Empowering teachers and their students
- Encouraging sharing and collaboration
- Archive of replicable model projects



Statistics and Information

- Participating Schools—**662**
- Illinois School Districts—**122**
- Illinois Teachers—**2,000+**
- Projects and Resources—**4,000+**
- Logins in the past year—**50,000+**



◆ Welcome to the Collaboratory

You must have an account to use the Collaboratory.



User Name:

Password:

Login

If you don't have a Collaboratory account, click the How to Participate button to learn how to participate and set up a new account:

How to Participate



The Collaboratory Project



The Collaboratory

- Alerts and Interests
- Communication Services
- Projects and Activities
- Resources
- eCourses
- Volunteers



Headlines and Alerts

The screenshot displays the Collaboratory Portal interface. At the top, there is a navigation bar with buttons for 'help', 'news', 'projects', 'calendar', 'search', 'profile', and 'messages'. Below this, a secondary bar contains 'headlines', 'alerts', 'interests', and 'settings'. The main content area is titled 'Welcome to the Collaboratory Portal' and shows the date range 'March 14, 2001-March 28, 2001'. The primary section is 'Headlines for Alvin Gill', which includes a sub-section for 'Announcements' with three items: 'Role of Tech Conference' (Feb 12 2001), 'Bats in the Belfry' (Jan 11 2001), and 'MediaSpace Update' (Nov 28 2000). Each item has a 'Delete' button. Below this are sections for 'Alerts' (No Alerts found), 'Messages' (5 new messages), 'Invitations' (2 new invitations), 'Your Project Schedule' (2 events today, 4 events for the week), and 'Interests' (21 listed resources).

help
the collaboratory

news projects calendar search profile messages
headlines alerts interests settings

Welcome to the Collaboratory Portal
March 14, 2001-March 28, 2001

◆ Headlines for Alvin Gill

Announcements

- ▶ Role of Tech Conference Feb 12 2001
- ▶ Bats in the Belfry Jan 11 2001
- ▶ MediaSpace Update Nov 28 2000

Alerts
No Alerts found.

Messages
You have 5 new messages in the Messages section.

Invitations
You have 2 new invitations in the Messages section.

Your Project Schedule
You have 2 events or activities scheduled for today in the project calendars.
You have 4 events or activities scheduled for the rest of the week in the project calendars.

Interests
You have 21 listed resources of interest.

The Collaboratory Project
Northwestern University

Ameritech

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Communication Core Services

the collaborative portal

news projects calendar search profile messages

messages conference center forums invitations

Message List

Compose Message Refresh

Hello **ggreenberg**, You have **1** new and **10** old messages

From	Subject
NEW ggreenberg	Reminder
✓ adiaz	Re: Computer Help
✓ tmcculloch	Fw: Roadkill Study
✓ adiaz	Re: Computer Help
✓ kstair	Hi
✓ bthurber	Conference Times
✓ adiaz	Re: Computer Help
✓ adiaz	Re: Computer Help
✓ adiaz	Computer Help
✓ eestrada	Technology Night
✓ bdavis	Re: Deleting Interests?

Compose Message Refresh

the collaborative portal

news projects calendar search profile messages

project schedule collaborative events

September 2000

Steps to Success (Creating Great Science Fair Projects)

Steps to Success (Creating Great Science Fair Projects) Display Calendar 09/29/2000 Go to date

sunday	monday	tuesday	wednesday	thursday	friday	saturday
					1	2
3	4	5 · NPS-First 5 references due	6 · Selecting a Science Fair Topic	7	8	9
10	11 · Introduction to the EduPortal · NPS-Project Plan due	12 · NPS-First 5 Summaries due	13 · NPS-Start Experiment	14	15 · Resources for your Review of Literature (JCS) · Resources for your Review of Literature (NPS)	16
17	18 · JCS - Review Literature	19 · NPS-5 more references	20 · JCS - Introduce Portal	21	22	23
24	25 · JCS - Science Topic Due	26 · NPS-5 more summaries	27	28	29	30



Forums and Conferencing

The screenshot displays the Collaboratory Conferencing interface. At the top, there is a header with a smiley face icon, the text "Collaboratory Conferencing", and buttons for "Rules", "Help", and "Exit". Below this, there are two sections for room selection: "Pick a main room:" with a dropdown menu and a "Go" button, and "Create or go straight to a room:" with an input field and a "Go" button.

The main content area is split into two panes. The left pane shows a chat window for "#conference-center" with the following text:

#conference-center: No topic is set.
<Saly> is there a difference between crests and shields
<HanneW> oh, Sally I'm not sure...
<HanneW> never thought of that - I'll look it up in the dictionary
<Saly> thanks for looking it up.
<HanneW> the Danish English say våbenskjold = coat of arms
* Sally nods.
<HanneW> and the Danish English says: crest = the he... (våbenskjold)
<Saly> this is good!
<HanneW> well, I think shield is the correct word
<HanneW> I think I'll change all the nodes that use the word crest to shield
<Saly> better
<HanneW> let me look in my "advanced learner's dictionary"
<Saly> ok.
<HanneW> well, the word crest is ok together with the word shield
<HanneW> I think shield is "something royal"
<HanneW> So I will keep the word Crest :))

The right pane shows a forum list with the following items:

- COLE 2001 Online: Collaborative Resources**
Last Post: Monday March 19, 2001 2:14 PM Topics: 19
Discuss the activity questions for each of the Collaboratory communities with your classmates in the COLE-2001 online class.
- DMSF Discussions**
Last Post: Tuesday March 27, 2001 9:02 PM Topics: 12
DMSF scholars in the NU Young Scholars project can come here to discuss different issues and topics related to their high school experiences.
- eZine**
Last Post: Wednesday March 28, 2001 9:20 PM Topics: 19
Discussion for video eZine members.
- Goals 2000**
Last Post: Tuesday November 28, 2000 3:13 PM Topics: 11
Discussions for participants in the Goals 2000 program.
- Immigration and Family History Studies**
Last Post: Tuesday March 20, 2001 10:25 PM Topics: 3
In this forum, students from two schools, one in Winnetka and one in Skokie, will read the same novel which deals with immigration and family history. The name of the book is Orphan of Ellis Island by Elvira Woodruff. Teachers and students will post questions each week for students to respond to and share their thoughts together.
- Lessons Learned Through Fairy Tales**
Last Post: Friday March 23, 2001 8:25 AM Topics: 11
Fourth grade students identify morals of three well known fairy tales
- Science Fair Projects - NPS**
Last Post: Friday November 17, 2000 9:13 AM Topics: 3
Students display their Science Fair Projects. Hub Description: Once your project is completed, select a part of your work that you would like other students to see. For example: a plant diagram showing growth under different variables, a picture and description of your experiment, or a graph generated from a spreadsheet.

At the bottom of the chat window, there is a text input field with a cursor, a color palette, and a numeric keypad. The URL "www.cyberjourneys.net" and the room name "#conference-center" are displayed at the bottom.



Project and Activities

the collaboratory

help news projects calendar search profile messages

project list resources accounts

Project List

Steps to Success (Creating Great Science Fair Projects)

This project enables 7th-8th grade students at Jordan Community and Norwood Park Schools to create meaningful science fair projects.

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Project List

Steps to Success (Creating Great Science Fair Projects)

This project enables 7th-8th grade students at Jordan Community and Norwood Park Schools to create meaningful science fair projects.

Student Overview

The Collaboratory will help you create a great science fair project in the year 2000.

ask yourself these questions.
What idea for your science fair project?
How to find information using the Internet?
What is the scientific method?
What is a review of literature?

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Resources

Resources for a Successful Science Fair Project (Cybrary)

Resources for science fair projects: topics, the scientific method, sample projects, helpful hints, do's and don'ts and final presentation tips.

Science Fair Projects - JCS (MediaSpace)

Students display their Science Fair Projects.

Science Fair Projects - NPS (MediaSpace)

Students display their Science Fair Projects.

Science Fair Resources in the Library - JCS (Internet Book Club)

The school library has print and visual resources for your science fair project. The titles listed below have been selected as valuable materials for creating a successful science fair project.

Science Fair Resources in the Library - NPS (Internet Book Club)

The school library has many print and visual resources for your science fair project. The list below is a selected list of materials in the library to help you with your research.

Science Fair Survey (Survey Studio)

This survey is to be completed when the student has completed the project.

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Real World Relevance

Choosing a meaningful topic that interested the student and completing an experiment using the scientific method to future work experiences. The students used higher order thinking skills to research, record and analyze data. Students become responsible for their work. They have a vested interest in being successful.

Activities

- Selecting a Science Fair Topic Sep 06 2000
- Resources for your Review of Literature (JCS) Sep 2000
- Resources for your Review of Literature (NPS) Sep 15 2000
- NPS Media Space Nov 21 2000
- JCS Media Space Nov 21 2000
- Science Fair Survey Dec 02 2000
- Peer Conferencing Jan 16 2001

Resources

the collaboratory

help news projects calendar search profile messages

project list resources accounts

Conclusion

5. CONCLUSION

In a word processor, evaluate and interpret the data from the OBSERVATIONS and RESULTS. Check that your RESULTS support the PURPOSE and prove or disprove the HYPOTHESIS.

6. Reference List

Include a list of articles, books, web sites, and electronic references cited in your work. Remember sources should have a copyright date 1993 or later. Reference list is alphabetical. Proper APA format is used.

Real World Relevance

Choosing a meaningful topic that interested the students, designing and completing an experiment using the scientific method is applicable to future work experiences. The students used higher order thinking skills to research, record and analyze data. Students become responsible for their work. They have a vested interest in being successful.

Activities

Resources



Illinois Learning Standards

Illinois Benchmarks:
Please select the Illinois Learning Standard and benchmarks for this activity.

English Language Arts

- 3.A.3a** Write compositions that contain complete sentences and effective paragraphs using English conventions.
- 3.B.3b** Edit and revise for word choice, organization, consistent point of view and transitions among paragraphs using contemporary technology and formats suitable for submission and/or publication.
- 3.C.3b** Using available technology, produce compositions and multimedia works for specified audiences.

Learning Area: Science

11. Understand the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.

- A. Know and apply the concepts, principles and processes of scientific inquiry.**
 - Middle/Junior High School Benchmarks**
 - 11.A.3a** Formulate hypotheses that can be tested by collecting data.
 - 11.A.3b** Conduct scientific experiments that control all but one variable.
 - 11.A.3c** Collect and record data accurately using consistent measuring and recording techniques and media.
 - 11.A.3d** Explain the existence of unexpected results in a data set.
 - 11.A.3e** Use data manipulation tools and quantitative (e.g., mean, mode, simple equations) and representational methods (e.g., simulations, image processing) to analyze measurements.
 - 11.A.3f** Interpret and represent results of analysis to produce findings.
 - 11.A.3g** Report and display the process and results of a scientific investigation.
- B. Know and apply the concepts, principles and processes of technological design.**

Activity Goals

Activity: NPS Media Space
Available Learning Areas: English Language Arts, Mathematics, Science

Learning Area: English Language Arts

- 1. Read with understanding.**
 - A.** Apply word analysis.
 - B.** Apply reading strategies.
 - C.** Comprehend a broad range of texts.
- 2. Read and understand ideas.**
 - A.** Understand how meaning is created.
 - B.** Read and interpret.
- 3. Write.**
- 4. List.**
- 5. Use.**

Learning Area: Mathematics

- 6. Demonstrate and apply a knowledge and sense of numbers, including numeration and operations (addition, subtraction, multiplication, division), patterns, ratios and proportions.**
 - A.** Demonstrate knowledge and use of numbers and their representations in a broad range of theoretical and practical settings.
 - B.** Investigate, represent and solve problems using number facts, operations (addition, subtraction, multiplication, division) and their properties, algorithms and relationships.
 - C.** Compute and estimate using mental mathematics, paper-and-pencil methods, calculators and computers.

Learning Area: Science

- 11. Understand the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.**
 - A.** Know and apply the concepts, principles and processes of scientific inquiry.
 - B.** Know and apply the concepts, principles and processes of technological design.
- 12. Understand the fundamental concepts, principles and interconnections of the life, physical and earth/space sciences.**
 - A.** Know and apply concepts that explain how living things function, adapt and change.
 - B.** Know and apply concepts that describe how living things interact with each other and with their environment.
 - C.** Know and apply concepts that describe properties of matter and energy and the interactions between them.
 - D.** Know and apply concepts that describe force and motion and the principles that explain them.
 - E.** Know and apply concepts that describe the features and processes of the Earth and its resources.
 - F.** Know and apply concepts that explain the composition and structure of the universe and Earth's place in it.
- 13. Understand the relationships among science, technology and society in historical and contemporary contexts.**
 - A.** Know and apply the accepted practices of science.
 - B.** Know and apply concepts that describe the interaction between science, technology and society.



Collaboratory Resources

- The Cybrary
- MediaSpace
- The Internet Book Club
- The Survey Studio



Robots and Robotics

The Cybrary The Collaboratory Project

↑ Back
Manage Category
Add New Link

The Cybrary The Collaboratory Project

About
Browse
Propose

Robots and robotics
LIST OF CATEGORIES Please choose one:
Add to Project Manage Cybrary

- ▶ **Current Robot Technology**
Changes and advances in the development of robots.
- ▶ **How Robots Are Used**
The many uses robots have in our current world.
- ▶ **Robot Development**
History and current information about the development of robots.
- ▶ **Robot Fun**
Interactive sites where you can develop and work with robots.
- ▶ **Robots and Artificial Intelligence**
How robots are programmed to think and function.

ROBOTS in SPACE OXFORD BROOKES UNIVERSITY
from here to infinity...

Welcome to the Robots in Space website! It contains lots of detailed robot information, 3D pictures and a series of animated cartoons starring Mervyn and Rover! To make the most of the site, please see the recommendations below, then [click here](#) to proceed...

Mervyn Rover

'Robots in Space - from here to infinity' was Brookes' 1998 Christmas Lecture for 11 - 13 year olds, presented by Dr Ashley Green, a senior lecturer in our School of Engineering. He readily accepted the challenge of the lecture, and worked hard with our supporters - [Leggo Mindstorms](#), [Leggo Dacta](#), Reading University's Department of [Cybernetics](#) and [Swallow Systems](#) - and others to ensure that it was not only fun and exciting, but also had a solid educational base.

Important - System Recommendations
Because this website uses multiple frames, javascript and Shockwave Flash, you'll need a relatively new browser (the latest versions of [Netscape](#) Navigator or [Microsoft](#) IE are advised) and a fast machine (Pentium PC or Macintosh PowerPC) to get the best out of it. If you don't already have the [Shockwave Flash](#) plug-in installed, it can be downloaded from [Macromedia](#).

For further information contact [David Attwood](#). Site designed by [Hugh Wallace](#).



Physics AP—Thermodynamics

Explore MediaSpace Hub/Project

AP B Thermodynamics

Spoke Title	School/Organization
9 Heat Experiments	Warren Township High School
16 Heat Graphics	Warren Township High School
21 Kinetic Theory Graphics	Warren Township High School
0 Kinetic Theory experiments	Warren Township High School
2 Laws of thermodynamics experiments	Warren Township High School
30 Laws of T	

[The direct URL hubID=314]

AP B Thermodynamics - Laws of thermodynamics experiments

AP B Thermodynamics - Laws of Thermodynamics Graphics

1. Engine absorbs heat from source at T_1 ; gas expands.

2. Heat source is removed; gas continues to expand, cooling to T_2 .

3. Cool gas is re-compressed; heat goes to sink at T_2 .

4. Cool gas is isolated and compressed, heating back to T_1 .

Efficiency = $\frac{T_1 - T_2}{T_1}$

by Paul Brenner from Warren Township High School

This graphic explains the different conditions necessary for maximum efficiency of a heat engine. The different steps of a heat engine and its processes are explained in the illustrations and also through accompanying graphs. This graphic explaining the processes of heat engines was provided by Microsoft, and was found in the online microsoft encarta encyclopedia.
<http://encarta.msn.com/index/concise/index/4F/MediaMax.asp?>

Back to **Spokes** **Next**



3rd Grade October Reads

Reading List View Reading Lists by School

Author
Title
Genre

School: Search

Ms. Werner's October Reads for Susie Werner from Stephen K. Hayt Elem

Click on a title to see book reviews.

Author	Title
Berenstain, Stan and Jan	The Berenstain Bears Trick or Treat
Bridwell, Norman	Clifford's Halloween
Brown, Marc	Arthur's Halloween
Holmelund	Father Bear Comes Home
Minarek, Elise	Mama, Do You Love Me?
Joose, Barbara	Just A Mess
Mayer, Mercer	Just A Mess

[Bookclub Home](#)
[Book Nook](#)
[Writers Circle](#)

Reading List View Reading Lists by School

Author
Title
Genre

School: Search

The Berenstain Bears Trick or Treat by Stan and Jan Berenstain [Up](#)

Humor, grade level K-2

Click on a reviewer name to view the review. One is the lowest rating, five is the highest.

Reviewer	Date	Rating	School
Beatriz P	Oct 25, 2000	5	Stephen K. Hayt Elementary School
Jennifer P	Oct 26, 2000	5	Stephen K. Hayt Elementary School

Reading List View Reading Lists by School

Author
Title
Genre

School: Search

The Berenstain Bears Trick or Treat by Stan and Jan Berenstain [Up](#)

Humor, grade level K-2

Rating: ★★★★★

Reviewed by: Jennifer P on 10/26/2000
Reviewer's Grade Level:

I loved the book "The Berenstain Bears Trick or Treat by Stan and Jan Berenstain because it is fun. It is about Sister Bear and Brother Bear dressing up for Halloween. Sister Bear was a ballerina and Brother Bear was a monster. Mother Bear said two things: "Stay in the neighborhood and don't eat any candy before you come home ok." They thought Miz McGrizz was a witch but she was a nice old lady. This book was funny. The pictures were fun.

(Review 2 of 8) [Previous](#) [Next](#) [Contribute](#)

[Bookclub Home](#)
[Book Nook](#)
[Writers Circle](#)
[Poets Corner](#)
[Teachers Lounge](#)



Roadkill Monitoring

Roadkill Monitoring Survey

[View Results](#)

Description: This is the actual study data accumulated during the field study.

Instructions: Complete a printed form of this survey in the field. Use a pencil. Check all information in the field before returning. Input all data into the Roadkill Study Project after you have returned.

1. **Date (mm/dd/yy):** (answer required)

2. **Study site #:** (answer required)

3. **Temperature (Specify C or F):** (answer required)

4. **Cloud Cover (% of sky covered):** (answer required)

5. **Precipitation:** (answer required)

- Fog
- Haze
- Drizzle
- Showers
- Thunderstorms
- Hail
- Snow
- Other: Please specify >
- No precipitation.

12. **Shoulder width to nearest non-maintained road:** (answer required)

13. **Characterize Driver field of vision:** (answer required)

- Unobstructed
- Obstructed by Vegetation of other Natural Features
- Obstructed by Man-made Objects

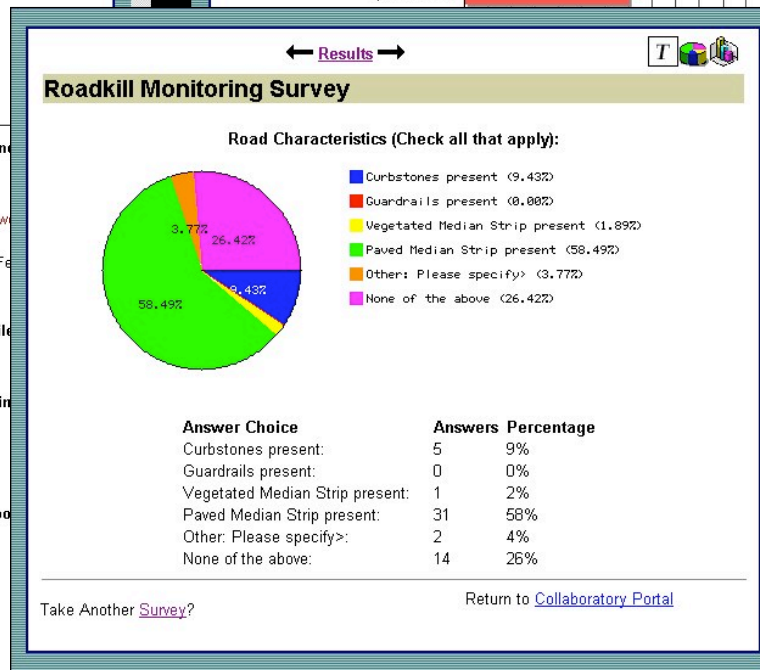
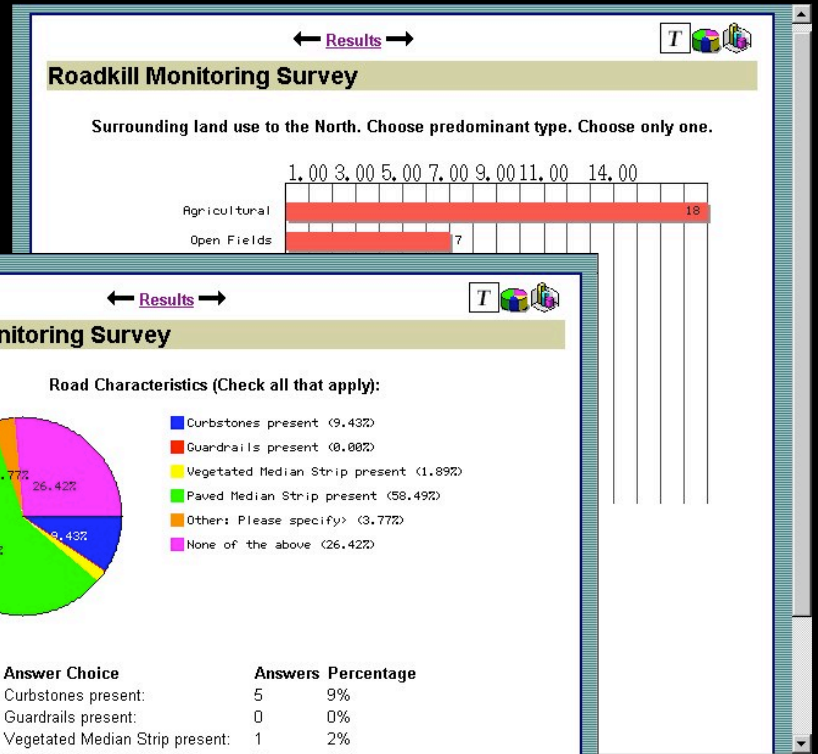
14. **Estimated Driver distance of view in miles:** (answer required)

15. **Characterize Traffic Conditions at the time of survey:** (answer required)

- Light
- Moderate
- Heavy

16. **Surrounding land use to the North.** (answer required)

- Agricultural
- Open Fields
- Forests
- Wetlands
- Lakes or Ponds
- River or Streams
- Residential
- Commercial
- Industrial
- Other: Please specify >



Online eCourses

The Collaboratory in Your Classroom

Welcome

The Collaboratory in Your Classroom eCourse is for educators who want to use the Collaboratory to develop technology enriched, project based learning

Course Content

- Welcome
- Syllabus
- Schedule
- Module I
- Module II
- Module III
- Module IV
- Module V

Collaboratory Tools

- Creating and Managing Projects
 - Creating a Project in the Collaboratory
 - Creating New Resources for a Project
 - Adding Existing Resources to a Project
 - Creating a New Activity for a Project
 - Creating and Managing Student Accounts
 - Creating and Managing Student Accounts
 - The Student/Participant View of a Project

Schedule

The Collaboratory in Your Classroom

The Collaboratory in Your Classroom September eCourse Schedule:

Module	Start Date	Assignments Due
Module I	Sept. 26, 2001	Sept. 27, 2001
Module II	Sept. 27, 2001	Oct. 3, 2001
Module III	Oct. 3, 2001	Oct. 10, 2001
Module IV	Oct. 10, 2001	Oct. 17, 2001
Module V	Oct. 17, 2001	Oct. 21, 2001

Online Conference schedule (select one for each week you are attending)

Module II + Assignment 3

Learning About MediaSpace

Overview: MediaSpace is the Collaboratory Resource which makes it possible to contribute text, graphics, sound and/or video to the web without having to build web pages. It is designed to encourage sharing projects and activities. Participants can make a contribution to an existing project or start a new project and invite others to contribute.

In this assignment you will:

- View a slide show which demonstrates using MediaSpace
- Examine a MediaSpace project
- Participate in a MediaSpace activity as a student
- Complete a self assessment

Click **View the Slide Show** to see an overview of MediaSpace, a Collaboratory Resource. After viewing the slide show, complete the two activities and the assessment listed below.

View Slide Show

Time Estimate: 0 hrs 40 mins

Activities:

- Introduction to MediaSpace
- Student View of MediaSpace
- Self Assessment: Assignment 2

Finished

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Volunteers

◆ Volunteer at the Collaboratory! [Volunteer Administration](#)



Collaboratory Volunteers have a unique opportunity to provide guidance and online support for Collaboratory members by assisting them with designing projects, activities and resources.

Opportunities include moderating conferences, the "Ask an Expert" service and guiding projects.

[The Volunteers](#)

◆ Conference Schedule

Weekly Conference Schedule - Central Standard Time

- Monday - 3:30 - 4:30 pm
Creating Resources/Activities
- Tuesday - 3:30 - 4:30 pm
Project Development or Topic of the Month
- Wednesday - 7:30 - 8:30 pm
Creating Resources/Activities
- Thursday - 7:00 - 8:00 pm
Project Development
- Thursday - 8:00 - 9:00 pm
Participating in a Sponsored Project
- Saturday - 8:30 - 9:30 am
General Collaboratory Chat
- Sunday - 3:00 - 4:00 pm
General Collaboratory Chat

◆ Volunteer Events

[Volunteer Administration](#)

[Home](#)

[Gary Greenberg's Volunteer Profile](#)

[Volunteer](#)

[Conference](#)

[Learn More](#)

[Resources/Activities](#)

4:30 pm CST

[Resources/Activities](#)

- 9:00 pm CST

[Collaboratory Chat](#)

- 9:30 am CST

[Collaboratory Chat](#)

4:00 pm

[Participating in a Sponsored Project](#)

- 9:00 pm

[Project Development /Topic of the Month \(Expert\)](#)

4:30 pm

[Learn More](#)

[Participating in the Collaboratory](#)

[Participating in the Classroom](#)

[Classroom](#)

[Sponsored Project](#)

[Learn More](#)



Environment

- WebObjects 5.0
- Deployment: Sun Server E250—Apache
- Development: Windows 2000
- Database: Microsoft SQL Server
- Database Server: Dell—JDBC: JTurbo
- Web Server: Dell—Microsoft IIS
- Version Control: CVS





Members of the **Collaboratory Project Staff** develop and support the Collaboratory online resources and services, provides project consulting and support for teachers developing projects in the Collaboratory, and works with schools, school districts, and education organizations to develop initiatives that take advantage of the Collaboratory.

Gary Greenberg, Director

Needs assessment, project planning
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Bob Davis, Project Manager

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Bonnie Thurber, Project Consulting, Training and Support

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Unique Problems Solved

- Development of a reusable set of Learning, Media and Display Objects which form the core of our next generation of applications

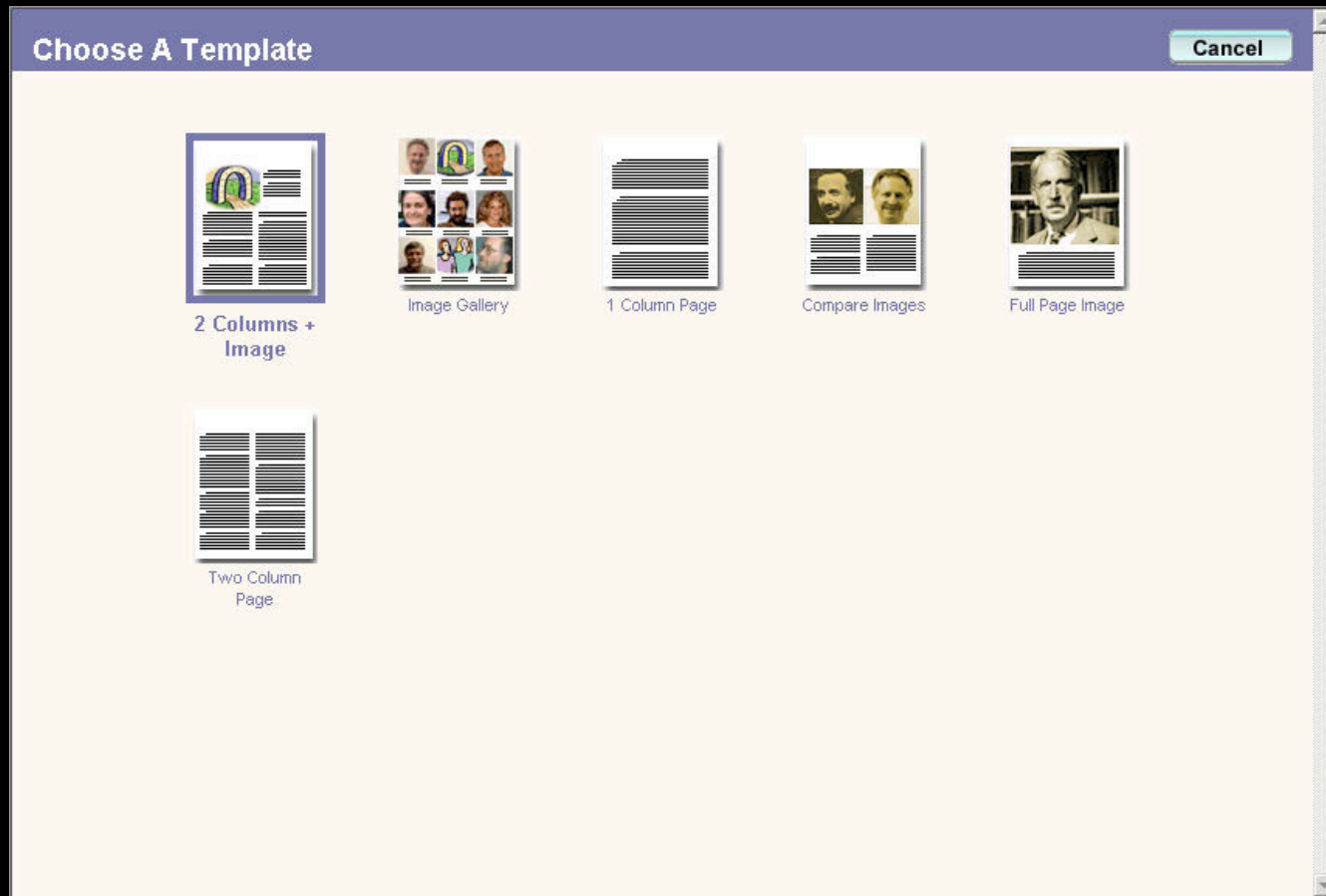


Reusable Objects

- Learning Objects
 - Reflection, Assessment, Annotation, Peer Critiquing, Focused Feedback, Editing, Notification
- Media Objects
 - PDF, Video, MS Word, Graphics, Midi, MP3, Thumbnail . . .
- Display Objects
 - Interface Design, Layout, Navigation, Sequencing



Display Object



Media Object

Stuart Dent (stu)
1900 - 1934 - The Triangle Shirtwaist Factory (The Trial)

[Edit](#) [Delete](#) [Publish](#) [Return](#)

The Triangle Shirtwaist Factory (The Trial) F D



March 25, 1911

The fire at the Triangle Shirtwaist Company in New York City, which claimed the lives of 146 young immigrant workers, is one of the worst disasters since the beginning of the Industrial Revolution. This incidence has a great significance to this day because it highlighted the miserable working conditions to which unskilled industrial workers can be subjected. To many, its horrors epitomize the evils of the extremes of industrialism. The tragedy still dwells in the collective memory of the nation and of the international labor movement. The victims of the tragedy are still celebrated as martyrs at the hands of industrial greed.

Defendants: Max Blanck and Isaac Harris
Chief Defense Lawyer: Max D. Steuer
Crime Charged: Manslaughter
Chief Prosecutors: Charles S. Bestwick and J. Robert Rubin

At the turn of the 20th century, poor working conditions and long hours were standard for most factory employees — especially for female workers. Male unions and



Reusability

- Access Control
 - Accounts/groups authentication and permissions
- Core Objects
 - Learning, Media and Display Objects
- Javascript and Stylesheet Components
- Interface Widgets

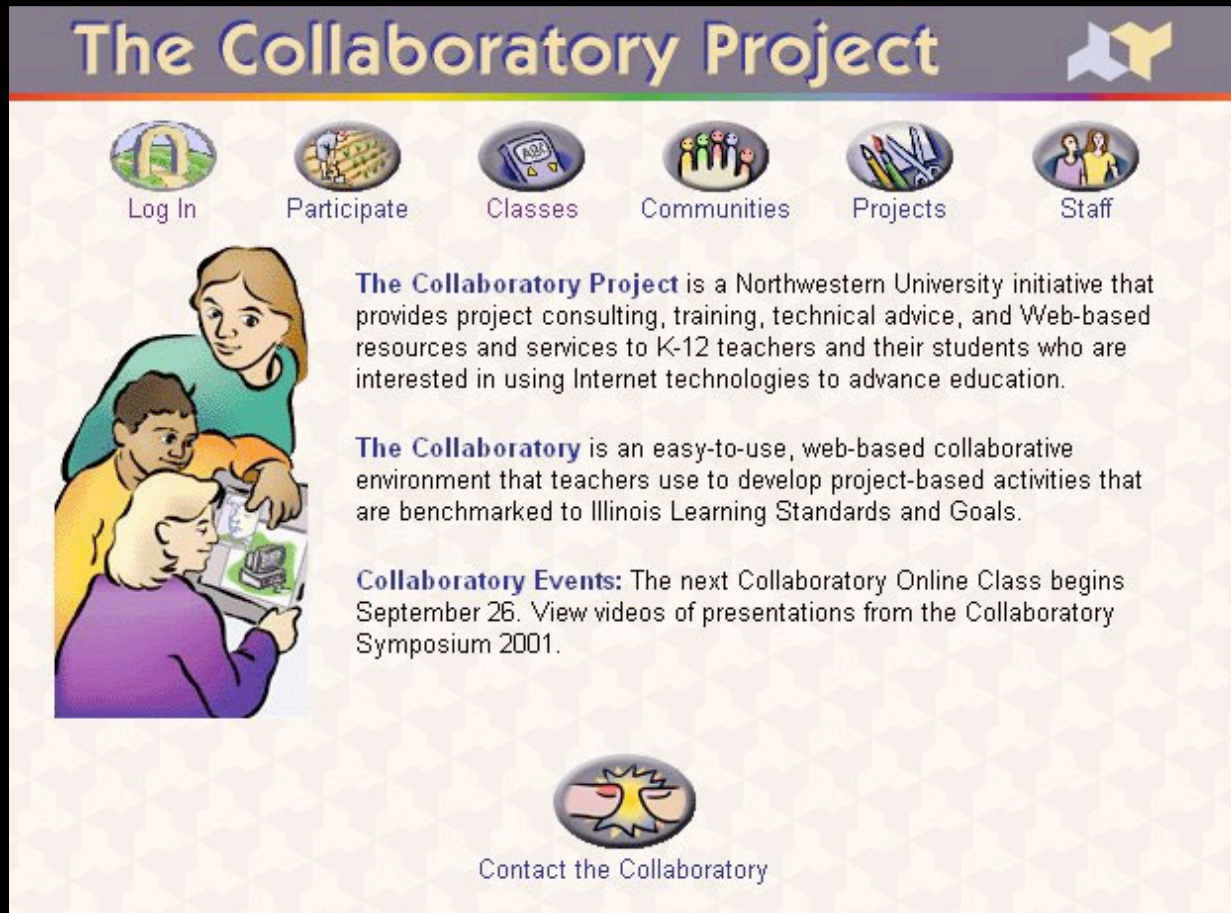


Scalability

- Expecting to grow to over 100,000 accounts in 2003
- Plan to add additional WebObject servers and load balancing as needed
- Upgrade to MS SQL Server 2000
- Upgrade Quicktime Server



collaboratory.nunet.net



The screenshot shows the homepage of 'The Collaboratory Project'. At the top, the title 'The Collaboratory Project' is displayed in a stylized font, accompanied by a logo of three overlapping shapes in blue, yellow, and red. Below the title is a navigation bar with six circular icons and their corresponding labels: 'Log In' (a person at a computer), 'Participate' (a person at a computer with a gear), 'Classes' (a book with 'ABC' on it), 'Communities' (a group of colorful figures), 'Projects' (a pencil and a paper airplane), and 'Staff' (two people). On the left side, there is an illustration of a woman in a green shirt pointing at a computer screen held by a woman in a purple shirt, with a man in a yellow shirt looking on. To the right of this illustration, there are three paragraphs of text. The first paragraph describes the project as a Northwestern University initiative providing consulting, training, and technical advice to K-12 teachers. The second paragraph describes the Collaboratory as a web-based collaborative environment for project-based activities. The third paragraph mentions 'Collaboratory Events' starting on September 26. At the bottom center, there is a circular logo featuring a stylized sun or starburst, with the text 'Contact the Collaboratory' underneath it.

The Collaboratory Project

Log In Participate Classes Communities Projects Staff

The Collaboratory Project is a Northwestern University initiative that provides project consulting, training, technical advice, and Web-based resources and services to K-12 teachers and their students who are interested in using Internet technologies to advance education.

The Collaboratory is an easy-to-use, web-based collaborative environment that teachers use to develop project-based activities that are benchmarked to Illinois Learning Standards and Goals.

Collaboratory Events: The next Collaboratory Online Class begins September 26. View videos of presentations from the Collaboratory Symposium 2001.

Contact the Collaboratory





PowerSchool

Matthew Firlik
Senior Software Engineer
PowerSchool

Introduction

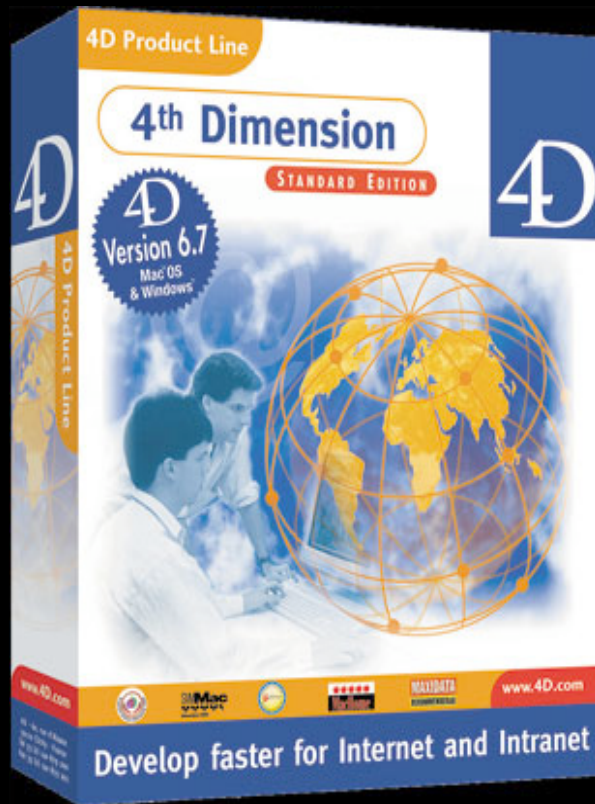
Who and what is PowerSchool

- Division of Apple
- Student Information System
- Targeted at K–12 districts



Technology Decision

In the beginning ...

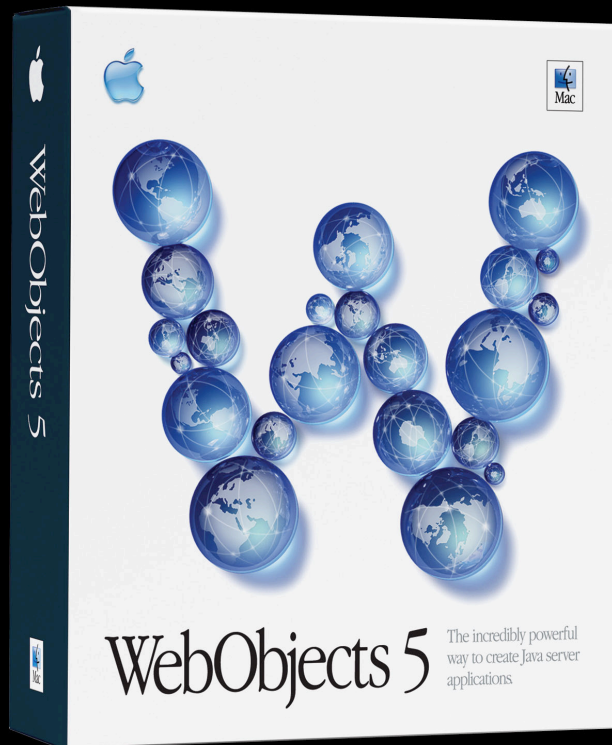


- PowerSchool
 - Developed in 4D
 - Up to 7500 students
 - 80% of districts (US)
 - 20% of students in (US)



Technology Decision

Where we are now...



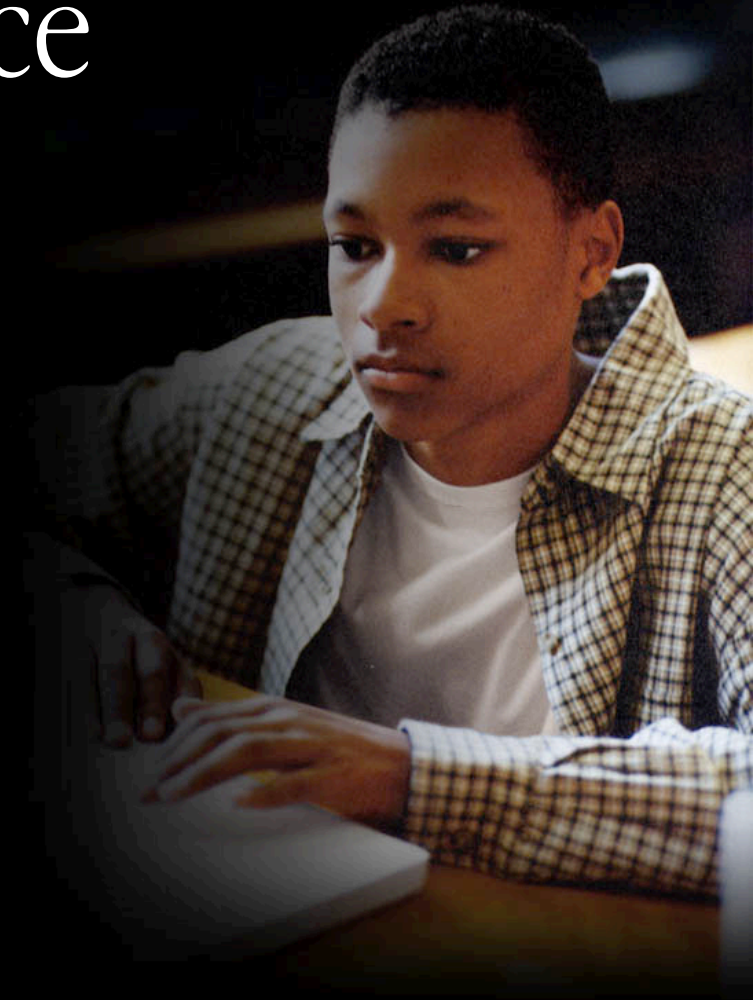
- PowerSchool Enterprise
 - Developed in WebObjects
 - 7500+ students
 - 20% of districts (US)
 - 80% of students in (US)



Application Audience

The PowerSchool Users

- Students
- Parents
- Teachers
- Administrators



Parents and Students

Fostering communication

PowerSchool School: Apple Grove High School District: Fremont Unified School District Logout

Allredge, Kimberly Grade: 11

- Grades and Attendance**: Check your student's current grades, total absences and tardies for each class.
- Teacher Comments**: Read comments about your student from his or her teachers for this school year.
- Grade History**: View the history of your student's term grades that were earned during this school year.
- School Bulletin**: Discover what is happening at your student's school.
- Attendance History**: View the history of your student's total absences and tardies for this school year.
- Class Registration**: Submit course requests for your student for the upcoming school year.
- Email Notifications**: Have your student's progress reports automatically emailed to you.
- Meal Balance**: View the remaining balance for your student's lunch or breakfast meals.

PowerSchool

Start Page > Grades and Attendance

PERIOD	LAST WEEK					THIS WEEK					COURSE	Q1	Q2	S1	ABSENCES		TARDIES					
	M	T	W	T	F	M	T	W	T	F					Pr-01	YTD	Pr-01	YTD				
01	T	T	T													98	88	98 (A)	8	9	8	9
02		A														84	72	84 (B)	2	8	2	8
03																77	89	77 (C)	9	7	9	7
04																56	88	56 (D-)	8	5	8	5
05																94	99	94 (A)	9	9	9	9
06		A														64	52	64 (D)	2	6	2	6
07																38	24	38 (F)	4	3	4	3

Legend: **A** = Absent **P** = Present **T** = Tardy **E** = Etc...

Current Simple GPA (X1): **2.6**

Print Page



Parents and Students

Fostering communication

- Real-time status and information
 - Grading, student progress
 - School calendar
 - Future assignments
- Development of communication
 - Student, teacher, parent



Teachers

Information access

PowerSchool School: Apple Grove High School Term: 02-03 Quarter 2

Start Page > Student Information

AP History Period 01

Allredge, Kimberly
 Baird, Olivier
 Barnes, Deangelo
 Barta, Jon
 Bishop, Francesco
 Boyd, Melissa
 Jewell, Elvin
 Lakely, Adrianna
 McCormick, Pierce

Quick Lookup
 Allredge, Kimberly 11 43000056 AGHS

Change Class

- 01 AP History
- 02 Self Esteem
- 03 Horticulture
- 04 Physical Education
- 05 Pre-Calculus
- 06 Work Study
- 07 Art Appreciation

Period	Last Week	This Week	Classes							
01	.....	.....	AP History B202A Adams, Jeffrey							
02	T....	.....	Self-Esteem D401 Lam, Chi							
03	.....	.....	Horticulture PS13 Merino, Michelle C	67	80	72 (C-)	0	0	2	2
04	....	.....	Physical Education PE80 Rambow, Simeon H	98	56	70 (C-)	0	0	6	2
05	..A..	.....	Pre-Calculus M400 Demeter, Christopher	77	78	77 (C)	0	0	4	4
06	.....	.A.T.	Work Study WS999 dErrico, Elizabeth	CR	CR	CR	0	0	2	2
07	....T	.....	Art Appreciation A101 Powers, Rachel	99	100	99 (A)	0	0	2	2

Current Simple GPA (X1): 2.9900

PowerSchool School: Apple Grove High School Term: 02-03 Quarter 2

Adams, Jeffrey

Start Page
 Daily Bulletin
 Reports
 Faculty Directory
 Personalize

Current Classes
 Select the icon to take attendance, submit meal count, view student information, or print a report.

- 01 AP History
- 02 Computer Programming
- 03 Computer Graphics
- 04 Software Applications
- 05 Computer Technology



Teachers

Information access

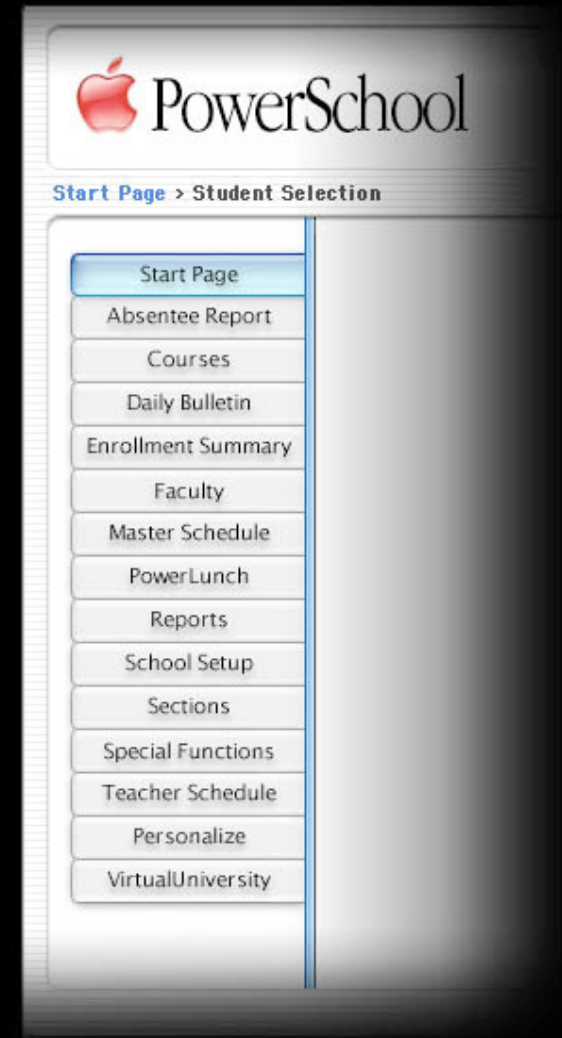
- Two-way communication with SIS
- Ease of time and information management
- Access from any workstation, location



Administrators

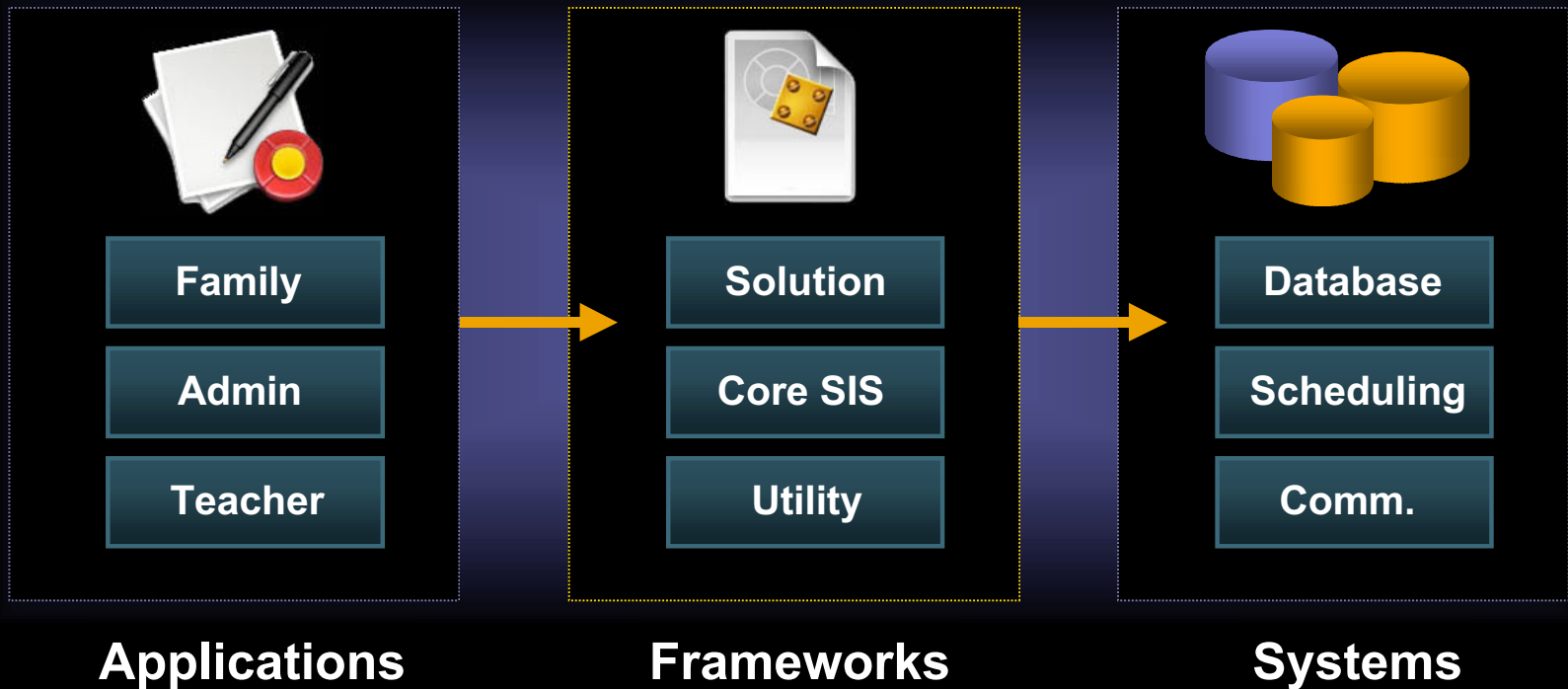
Centralized administration

- Secure, real-time data access
- Manage large, complex data sets
- Aggregated and state-mandated reporting mechanisms



Architecture

How is PowerSchool designed?



Challenges

Technology, infrastructure, and presentation

- Complex data manipulation and presentation
- Data validation
- Ad-hoc and state-mandated reporting
- External system interfacing
- Multi-platform support
- “Shrink Wrap” with customization



Technology

Development of PowerSchool

- Deployments
 - IIS/Windows/SQL Server
 - Apache/Solaris/Oracle



Technology

Development of PowerSchool

- Deployment examples
 - District with 20,000 students
 - Statewide deployment
 - Top-10 school district with over 200,000 students



Technology

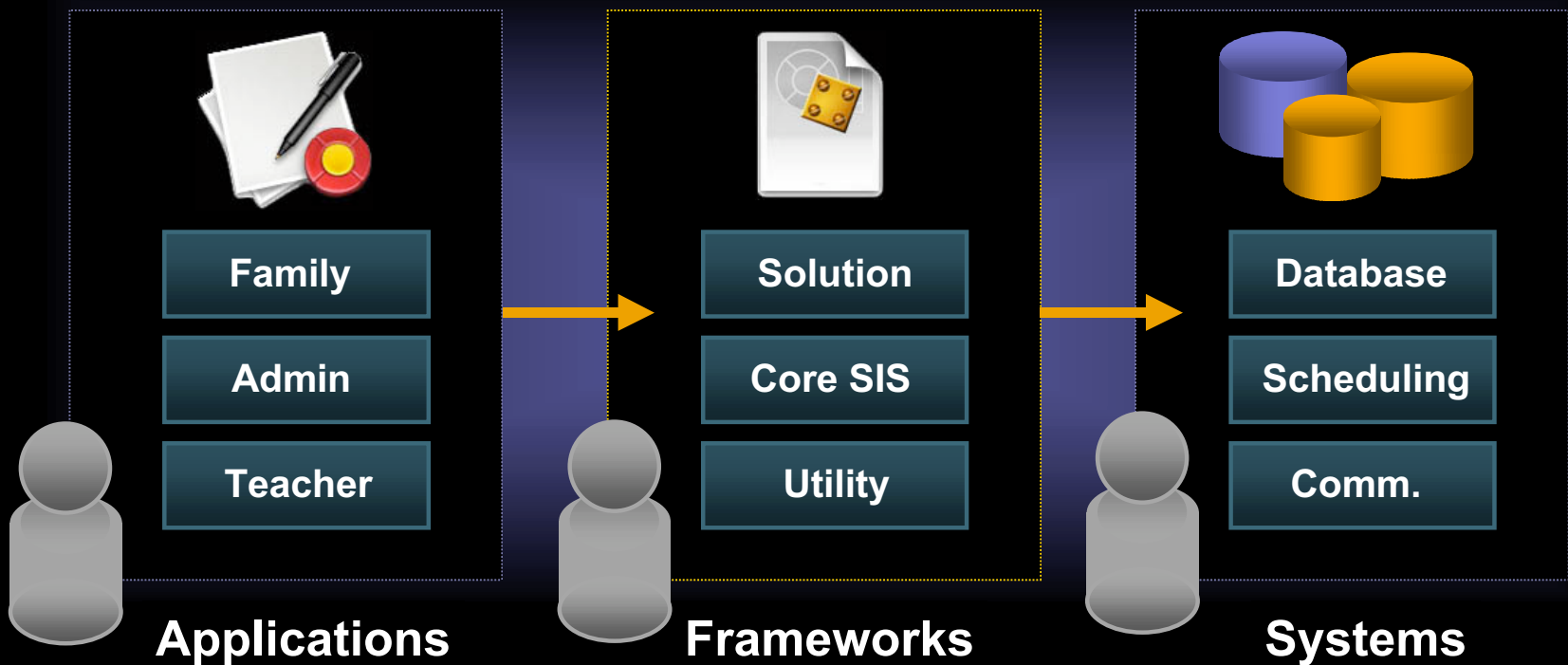
Development of PowerSchool

- WO 4.0 to 4.5.1 to 5.1
- Developed in Java (from the start)
- Development
 - Project Builder on Mac OS X
 - Revision control through Perforce
 - Staged Oracle databases



Development Teams

How is PowerSchool engineered?



Development Teams

How is PowerSchool engineered?



Marketing

Analysis



Quality Assurance

Tech Pubs



Implementation

Training



Future

Next up for PowerSchool...

- Interface usability
- Deployments on Mac OS X
- Features, features, features . . .





Deutsche Bank 24

Thomas Lehmann
Consultant, Web Application Development
GFT Financial Solutions

Introduction

- Deutsche Bank 24 is a subsidiary of Deutsche Bank for retail banking
- 2 million customers using the web application
- WebObjects is used to build the banking and brokerage application
- Since 1996 applet solution
- Since 1998 WebObjects solution





Transaktionsmanager

Willkommen!
Ihr persönlicher Transaktionsmanager.

Login

Filiale: (dreistellig)

Konto: (siebenstellig)

Unterkonto: (zweistellig)

PIN: (fünfstellig)

→ [Aktuell: Bis zu 40% sparen mit der Moneyshop Privat-Haftpflichtversicherung!](#)

- Sicherheit beim Online-Banking
- Weltweit kostenlos Bargeld abheben
- Häufig gestellte Fragen

ausführen

▶ [Zum Online-Banking mit WebSign 24](#)

Aktuell:

Mit WebSign 24+ schon heute elektronisch unterschreiben. Infos und Details - [jetzt anmelden.](#)



Transaktionsmanager

- Ihr Konto
- Ihr Depot
- Vermögensübersicht
- Performance
- Umsätze
- Cash Flow
- Wertpapierkauf
- Wertpapierverkauf
- Neuemissionen
- Orderbuch
- Direct Trade
- Unser Service
- Sicherheit
- Einstellungen
- Übersicht
- Kunden-Logout

Vermögensübersicht

Vermögensübersicht per: [Eingrenzen](#) [Anzeigen](#)

Sortieren nach: Ansicht:

Bestand	Bezeichnung	Whg	aktueller Kurs (Wp.)	aktueller Kurs (Dev.)	Kurswert (inkl. Stückzinsen)	Anteil (in %)
Liquidität						
675,48	Kontokorrent	EUR		1,0	675,48	25,40
86,31	MaxBlue Konto	EUR		1,0	86,31	3,25
Summe:					761,79	28,65

Renten						
<input checked="" type="radio"/>	1	RING-RENTENFONDS DWS ANTEILE	EUR	21,56	1,0	21,56 0,81
Summe:					21,56	0,81

Aktien						
<input type="radio"/>	2	CARGOLIFTER AG VINK.NAM.-AKT.O.N.	EUR	3,55	1,0	7,10 0,27
<input type="radio"/>	7	DEUTSCHE BANK AG NAMENS-AKTIE O.N.	EUR	72,74	1,0	509,18 19,15
<input type="radio"/>	1	DWS VERMOEGENSBILDUNGSFONDS I ANTEILE	EUR	88,63	1,0	88,63 3,33
<input type="radio"/>	1	DZ BANK MEDIASTARS PAR.ZERT.V.00 G.11.08.05	EUR	54,10	1,0	54,10 2,03
<input type="radio"/>	90	GFT TECHNOLOGIES AG AKTIE O.N.	EUR	5,20	1,0	468,00 17,60
<input type="radio"/>	1	GIGABELL AG AKTIE O.N.	EUR	0,00	1,0	0,00 0,00
<input type="radio"/>	50	GLOBAL CROSSING LTD.SHARES DL-,01	USD	0,09	1,13636	5,04 0,19



- Favoriten
- Verlauf
- Suchen
- Album
- Seitenhalter



Willkommen in Ihrem persönlichen Transaktionsmanager!

Round Lot Änderung für DAX und MDAX Instrumente in Xetra

Ihr Depot

▶ Bitte geben Sie Ihre Kontodaten ein und wählen Sie die von Ihnen gewünschte Aktion:

Filiale:	<input type="text" value="950"/>	(dreistellig)
Konto:	<input type="text" value="3957123"/>	(siebenstellig)
Unterkonto:	<input type="text" value="00"/>	(zweistellig)
PIN:	<input type="text"/>	(fünfstellig)

▶ Wichtige Informationen über die [besonderen Risiken beim Day-Trading](#)

▶ Sicherheit beim Online Banking. [Für weitere Informationen klicken Sie hier](#)

Ein Maximum an Sicherheit für Ihre Daten: Das -Symbol im unteren Browser-Rand steht für sichere Übertragung per SSL.

[Zum Online-Banking mit WebSign 24](#)



**Ihr Konto
Ihr Depot**

- Vermögensübersicht
- Performance
- Umsätze
- Cash Flow
- Wertpapierkauf
- Wertpapierverkauf
- Neuemissionen
- Orderbuch
- Direct Trade

- Unser Service
- Sicherheit
- Einstellungen
- Übersicht

Vermögensübersicht

Kundennummer: 950/3957123
Portfolio: 950395712300

Vermögensübersicht per: [Eingrenzen](#) [Anzeigen](#)
Sortieren nach: Ansicht:

Bestand	Bezeichnung	Whg	aktueller Kurs (Wp.)	aktueller Kurs (Dev.)	Kurswert (inkl. Stückzinsen)	Anteil (in %)
Liquidität						
675,48	Kontokorrent	EUR		1,0	675,48	25,38
86,31	MaxBlue Konto	EUR		1,0	86,31	3,24
Summe:					761,79	28,62
Renten						
<input checked="" type="radio"/>	1 RING-RENTENFONDS DWS ANTEILE	EUR	21,56	1,0	21,56	0,81
Summe:					21,56	0,81
Aktien						
<input type="radio"/>	2 CARGOLIFTER AG VINK.NAM.-AKT.O.N.	EUR	3,55	1,0	7,10	0,27
<input type="radio"/>	7 DEUTSCHE BANK AG NAMENS-AKTIE O.N.	EUR	72,63	1,0	508,41	19,10
<input type="radio"/>	1 DWS VERMOEGENSBILDUNGSFONDS I ANTEILE	EUR	88,63	1,0	88,63	3,33
<input type="radio"/>	1 DZ BANK MEDIASTARS PAR.ZERT.V.00 G.11.08.05	EUR	54,10	1,0	54,10	2,03
<input type="radio"/>	90 GFT TECHNOLOGIES AG AKTIE O.N.	EUR	5,25	1,0	472,50	17,75
<input type="radio"/>	1 GIGABELL AG AKTIE O.N.	EUR	0,00	1,0	0,00	0,00



Unique Problems Solved

- CORBA connection to Middleware
- Business Objects
- Navigation concept
- Multilanguage, multilayout application
- Integration of chip card legitimation using applet and live connect
- Heavy load



Tools and Environment

- WebObjects on Win2k
- CVS server on Linux
- Oracle/JDBC
- Homegrown Middleware for EAI
- SUN Solaris as test app server
- Apache webserver on Linux
- Up to 5 developers simultaneously



Reusability

- Input/Output Component Framework with XML configurable components
 - Selection lists
 - Formatted currency values
 - Generic input validation
- Navigation concept
- Different applications for different banks reusing core implementations



Scalability

- Two SUN E10k running the WebObjects instances
- 480 application instances
- 150,000 customers are logged in every day (maximum 400,000)
- Webservers handling 11.5 million HTTP requests (equals 25 GB net traffic)

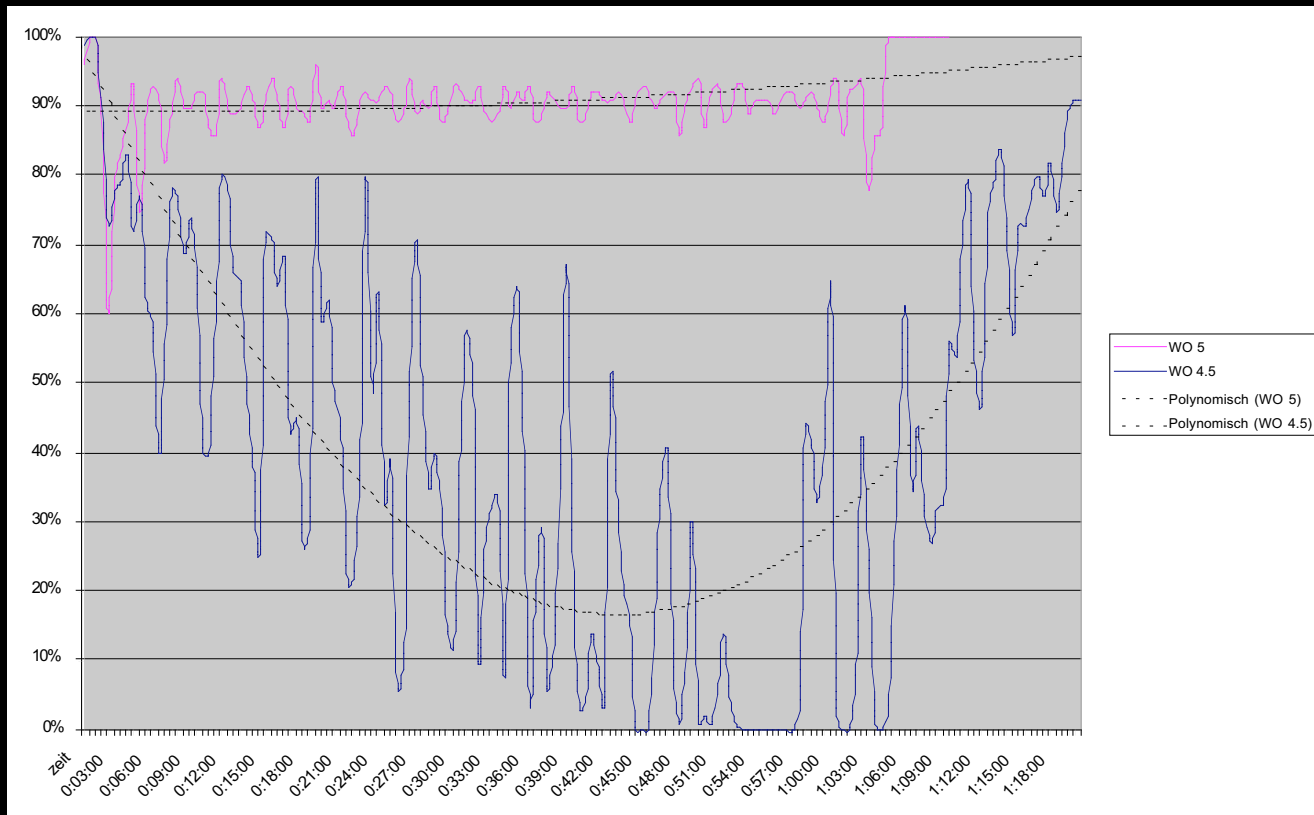


Hardware Architecture



WO4.5 vs. WO5

CPU idle time during a typical test case



WO4.5 vs. WO5

- Significant more performance
- 70 to 200 percent faster
- Very small CPU workload
- Improved availability
- High scalability
- With same hardware we are able to serve 4 times more customers



WO4.5 vs. WO5

Converting issues

- Script-based converting solves 90 percent of all issues
- Problems with log4j caused by JDK version change
- No problems with live connect for Chip Card communication





Weblicon PIM

..

Michael Buning
CTO, Weblicon Technologies AG

Weblicon PIM

- Personal Information Manager (PIM) for Telcos, Portals, Corporates
- Complete Organizer
 - Address Book, Calendar, ToDo
 - Email, SMS, MMS
- Based on WebObjects 5.1



Weblicon Architecture

Mac/PC

Mobile Phones

HTML

JavaClient

SyncML

WML

VoiceXML

J2ME

Address

Calendar

ToDo

Email

SMS

MMS

EOF

LDAP

RDBMS

IMAP



WO Frameworks

Mac/PC

Mobile Phones

WebObjects

WAPObjects

VoiceXMLObjects

HTML App

WML App

VoiceXML App

Address

Calendar

ToDo

Email

SMS

MMS





Screenshots

..

Michael Buning
CTO, Weblicon Technologies AG

Save New Group Delete Revert All List Single Search Prev Next Help

Display: ABCDEFGHIJKLMNOPQRSTUVWXYZ All

Find:

	Category	Name	First Name	Company	Address	Postal Code	City	
	Business	Brinkschulte	Carsten	weblicon technologies AG	Torstr. 6	10119	Berlin	
	Business	Buening	Michael	weblicon technologies AG	Torstr. 6		Berlin	
	Business	Estel	Ute	Conrad Electronis Computer Ltd	11 Downing Street	N1 8QE	London	
	Private	Ferset	Petra		Rödelweg 14	80896	München	
	Business	Fischlein	Wolfgang	weblicon technologies AG	Torstr. 6	10119	Berlin	
	Business	Haas	Peter		Rittergasse 6/16	1040	Wien	
	Project 2	Kohlmann	Peter	Times Square BID	7th Street	22587	New York	
	Private	Ligscher	Sandra		Sandweg 12	19874	Berlin	
	Project 1	Longstedt	Sylvia	Torany Computer Inc.	Ronda Boulevard	25814	Paris	
	Private	Modiliare	Francesca	DigiCom	La Isla Bonita	15487	Madrid	
	Private	Oberhausen	Wolfgang		Freiburger Weg 18	15438	Hausen	
	Business	Seitz	Robert	Nova Media	Bochumer Strasse 22	10555	Berlin	
	Business	weblicon (4)						

- Addresses
- Messages
- Appointments
- To Do's
- Preferences
- Logoff

Save
 New
 Group
 Delete
 Revert
 All
 List
 Single
 Search
 Prev
 Next
 Help

Personal & Address

First Name: MI: Address:
 Last Name: Form:
 Title: City:
 Company: State:
 Department: Postal Code:
 Jobtitle: Country:
 Category:

Communication

Type:	Number/Address/URL:	
Mobile	<input type="text" value="0172-8872758"/>	
Phone	<input type="text" value="+49-30-72 62 69-0"/>	
Fax	<input type="text" value="+49-30-72 62 69-100"/>	
eMail	<input type="text" value="carsten@weblicon.net"/>	

Notes



Address: @ http://www.weblicon.de/apps/WebObjects/Kubrick.woa/66/wo/pm2qNAPj08Zn2Voucl5f8KxrxC9/1.0.0.PageWrapper.4.1

@ Intranet @ VersionTracker @ heise @ macnews @ Allbank

weblicon



- Addresses
- Messages
- Appointments
- ToDos
- Preferences
- Logoff

Folder

- ▼ screenshots@BeOrganized.net
 - Sent <—
 - Outbox <—
 - Drafts <—
 - INBOX (1)**
 - Trash <—

	Subject	From	Date ▾	
	Meeting for CeBit preparation	Frank Daubenberger <frank@weblicon.net>	Wednesday, February 27, 2002 12:41 PM	
	Welcome to BeOrganized.net	"welcome@BeOrganized.net" <welcome@BeOrganized.net>	Thursday, February 21, 2002 2:08 PM	

Page 1 of 1

Subject: Meeting for CeBit preparation **Date:** February 27, 2002

Hi John,

please call me to discuss the time and place for the meeting.

Best regards,

frank daubenberger . weblicon technologies ag
support, quality assurance

torstrasse 6 . vox: +49 (0)30-72 62 69-112 . www.weblicon.net
d-10119 berlin . fax: +49 (0)30-72 62 69-100 . frank@weblicon.net

weblicon

Save
 Check
 Send
 Email
 SMS
 Reply
 Reply All
 Forward
 List
 Split
 Single
 Prev
 Next
 Help

- Addresses
- Messages
- Appointments
- ToDos
- Preferences
- Logoff

Subject: PR agency

▼ To: "Brinkschulte, Carsten" <carsten@weblicon.net>
 ◀ To

▼ CC:
 ◀ Cc

▶ BCC:
 ◀ Bcc

Find:

- @ Brinkschulte, Carsten <carsten@weblicon.net>
- @ Buening, Michael <michel@weblicon.net>
- @ Estel, Ute <estel@conradeltd.co.uk>
- @ Ferset, Petra <petfer@webmail.de>
- @ Fischlein, Wolfgang <wolfgang@weblicon.net>

◀ Page 1 of 2 ▶

Message:

Hi Carsten,

we should make an appointment with the PR guys. How about next week tuesday afternoon?

Frank

Attachments:

Filename	Type	Size	
<input type="text"/>	<input type="button" value="Browse..."/>		

weblicon

Addresses

Messages

Appointments

ToDos

Preferences

Logoff

February 2002

CW	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
5	28	29	30	31	1 13:00 Supper w/ Perilla	2	3
6	4 09:00 Dentist 12:00 call Peter	5 13:00 PR meeting	6	7 10:00 send out press release	8	9 10:00 buy furniture	10 15:00 Skating
7	11 13:00 Lunch with WO-team	Carnival 12 10:00 check webserver	Ash Wednesday 13	14 11:00 Developer meeting	15 20:00 Dinner w/ Theo at TGIF	16	17
8	18 11:00 Staff meeting	19 09:00 3GSMWorld	20 09:00 3GSMWorld	21 09:00 3GSMWorld	22 09:00 3GSMWorld	23	24
9	25 11:00 tax consultant	26 11:45 Telco with BDM	27	28 09:00 spring campaign kickoff	1	2	3

February 02

CW	Mo	Tu	We	Th	Fr	Sa	Su
5							1 2 3
6	4	5	6	7	8	9	10
7	11	12	13	14	15	16	17
8	18	19	20	21	22	23	24
9	25	26	27	28			

March 02

CW	Mo	Tu	We	Th	Fr	Sa	Su
9							1 2 3
10	4	5	6	7	8	9	10
11	11	12	13	14	15	16	17
12	18	19	20	21	22	23	24
13	25	26	27	28	29	30	31

April 02

CW	Mo	Tu	We	Th	Fr	Sa	Su
14	1	2	3	4	5	6	7
15	8	9	10	11	12	13	14
16	15	16	17	18	19	20	21
17	22	23	24	25	26	27	28
18	29	30					

weblicon

Save
 New
 Delete
 Revert
 Month
 Week
 Day
 Prev
 Next
 Help

Addresses

Messages

Appointments

ToDos

Preferences

Logoff

Week 6 2002

	Monday 4 February	Tuesday 5 February	Wednesday 6 February	Thursday 7 February	Friday 8 February	Saturday 9 February	Sunday 10 February
9:00	Dentist						
15							
30							
45							
10:00				send out press release		buy furniture	
15							
30							
45							
11:00							
15							
30							
45							
12:00	call Peter						
15							
30							
45							
13:00		PR meeting					
15							
30							
45							
14:00							
15							
30							



February 02

CW	Mo	Tu	We	Th	Fr	Sa	Su
							1 2 3
	5						
	6	4	5	6	7	8	9 10
	7	11	12	13	14	15	16 17
	8	18	19	20	21	22	23 24
	9	25	26	27	28		

March 02

CW	Mo	Tu	We	Th	Fr	Sa	Su
							1 2 3
	9						
	10	4	5	6	7	8	9 10
	11	11	12	13	14	15	16 17
	12	18	19	20	21	22	23 24
	13	25	26	27	28	29	30 31

April 02

CW	Mo	Tu	We	Th	Fr	Sa	Su
	14	1	2	3	4	5	6 7
	15	8	9	10	11	12	13 14
	16	15	16	17	18	19	20 21
	17	22	23	24	25	26	27 28
	18	29	30				



 **SAVE**
 **NEW**
 **DELETE**
 **REVERT**
 **MONTH**
 **WEEK**
 **DAY**
 **PREV**
 **NEXT**
 **HELP**

Week 6 2002							
	Monday 4 February	Tuesday 5 February	Wednesday 6 February	Thursday 7 February	Friday 8 February	Saturday 9 February	Sunday 10 February
9:00	Dentist						
15							
30							
45							
10:00				send out		buy	
15				press		furniture	
30				release			
45							
11:00							
15							
30							
45							
12:00	call Peter						
15							
30							
45							
13:00		PR meeting					
15							
30							
45							

February 02

CW	Mo	Tu	We	Th	Fr	Sa	Su
	5				1	2	3
	6	4	5	6	7	8	9
	7	11	12	13	14	15	16
	8	18	19	20	21	22	23
	9	25	26	27	28		

March 02

CW	Mo	Tu	We	Th	Fr	Sa	Su
	9				1	2	3
	10	4	5	6	7	8	9
	11	11	12	13	14	15	16
	12	18	19	20	21	22	23
	13	25	26	27	28	29	31

April 02

CW	Mo	Tu	We	Th	Fr	Sa	Su
	14	3	2	3	4	5	6
	15	8	9	10	11	12	13
	16	15	16	17	18	19	20
	17	22	23	24	25	26	27
	18	29	30				

- ADDRESSES
- MESSAGES
- APPOINTMENTS
- TODOS
- PREFERENCES
- LOGOFF



KPN mobile

- contacten
- berichten
- kalender
- takenlijst
- instellingen
- afmelden

alles over mobiel bellen met KPN Mobile

GROEPSBERICHTEN BERICHTEN

lijst enkel SMS wissen ongedaan verstuur alle terug verder

aan: 355

zoek:

- Axel <01791018700>
- Berreth, Stefan <01772727268>
- Brinkschulte, Carsten <01728872758>
- Büning, Michael <01734845655>
- Daniel <01723142231>

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bericht: Great. Really live.

Eén SMS bericht bevat 147 karakters. Indien u meer dan 147 karakters typt, verstuurt u meerdere SMS berichten

19 gebruikte karakters

